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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,006	06/08/2001	Mathias Jean Rene Salle	B-4207 618871-7	1794

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IP Administration
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EXAMINER

FAROOQ, MOHAMMAD O

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,006

Applicant(s)

RENE SALLE, MATHIAS JEAN

Examiner

Mohammad O. Farooq

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RD

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sistanizadeh et al. U.S. Pat. No. 5,790,548 in view of Srisuresh et al. U.S. Pat. No. 6,058,431.

2. As to claim 1, Sistanizadeh et al. teach method, comprising:
using the first binding to enable the client to contact the gateway and thereby setting up a first session between the client and the gateway (via DNS server; item 332, 330 fig. 3; items 30 and 34; or 28 and 32; fig. 1); and

using the second binding to enable the gateway to contact the service provider and thereby setting up a second session between the client and the service provider, the second session being nested in the first session between the client and gateway such that second-session data is encapsulated in first-session data and is forwarded by the gateway between the client and service provider (via DNS server; item 346, 340, fig. 3; combination of items 36, 26 and 24; fig. 1; col. 8, line 65- col. 9, line 6).

Sistanizadeh et al. do not teach service provider bound by a first binding to the address of the gateway on the external network and by a second binding to the address of the service provider on the private network. Srisuresh et al. teach service provider bound by a first binding to the address of the gateway on the external network and by a second binding to the address of the service provider on the private network (because of the features of network address translation or NAT; title, abstract; fig. 7; col. 2, lines 7-19). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sistanizadeh et al. and Srisuresh et al. because that would provide service providers to determine the addresses specific to the needs of their clients (col. 2, lines 54-59).

3. As to claim 2, Sistanizadeh et al. teach method in which the first and second bindings are held on an external domain name server and private domain name server, respectively (items 332, 346; fig. 3).

4. As to claim 3, Sistanizadeh et al. teach method in which the first binding is held on an external domain name server, and the second binding comprises a first part held by an internal naming service of the gateway and mapping the virtual name to a real name of the service provider, and a second part held by the external domain server and mapping the real name of the service provider to its address on the private network (i.e. via internal DNSs; items 332 and 346, fig. 3; col. 6, lines 62- 67).

5. As to claims 4, 12 and 13, Sistanizadeh et al. teach method in which the external network includes the internet (i.e. since connection via ISP; see fig. 3).

6. As to claim 6, Sistanizadeh et al. teach method in which the first and second sessions are both secure sessions with their data being encrypted (see fig. 2, 3, 4A and 4B; col. 11, lines 34-39).

7. As to claim 7, Sistanizadeh et al. teach method, in which the client is on a second private network distinct from the private network of the service provider, a second gateway bridges the second private network and external network, and the client has a second virtual name that is bound by a third binding to the address of the second gateway on the external network and by a fourth binding to the address of the client on the second private network (items 28, 32 and 30, 34; fig. 1).

8. As to claim 8, Sistanizadeh et al. teach method, in which a second service provider on the second private network is able to communicate with an external network via a second gateway bridging the second private network and the external network, and the second service provider has a second virtual name that is bound by a third binding to the address of the second gateway on the external network and by a fourth binding to the address of the second service provider on the second private network (items 16, 18 and items 10 and 14; fig. 1; col. 11, lines 39-55).

9. As to claim 9, Sistanizadeh et al. teach method, in which the external network includes a further private network containing the private network of the service provider and there is a further gateway bridging the further private network to the portion of the external network which is external to the further private network (any of the routers in cloud 49; fig. 1; cloud 10 and 14; fig. 2), and wherein the virtual name is bound by a third binding to a routing address of the further gateway on the portion of the external network which is external to the further private network (via DNS server in fig. 2, 3; fig. 4B and 5).

10. As to claim 10, Sistanizadeh et al. teach method comprising:

allocating a virtual name to the server (via DNS server; item 332, 330; fig. 3; item 346, 340; fig. 3).;

at said external client, using the virtual name to address a said first message and a said second message, the former encapsulation the latter (inherent because of name to address resolution; fig. 2 and 3);

using the first mapping to route the first message, with its encapsulated second message, to the gateway (fig. 2 and 3; col. 8, line 65 – col. 9, line 6;); and

using the second mapping to route the second message extracted at the gateway from the first message, to the server (fig. 2 and 3; ; col. 8, line 65 – col. 9, line 6).

Sistanizadeh et al. do not teach mapping the server by a first mapping to the routing address of the gateway on the external network and by a second mapping to the routing address of the server on the private network. Srisuresh et al. teach mapping the server by a first mapping to the routing address of the gateway on the external network and by a second mapping to the routing address of the server on the private network (because of the features of network address translation or NAT; title, abstract; fig. 7; col. 2, lines 7-19). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Sistanizadeh et al. and Srisuresh et al. because that would provide service providers to determine the addresses specific to the needs of their clients (col. 2, lines 54-59).

11. As to claim 11, Sistanizadeh et al. teach method in which said first messages are encrypted (inherent; see fig. 2, 3, 4A and 4B).

12. As to claims 14, 15 and 16, Sistanizadeh et al. teach method in which the client and the service provider communicate by way of tunneled session via the gateway (since various types of connections; fig. 1, 2, 3, 4A and 4B).

Response to Argument

13. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

14. The examiner would like to point out new 103 (a) rejection by references Sistanizadeh et al. and Srisuresh et al. for the claims 1-4 and 6-16. Both of the references provide plurality of internal and external networks. Sistanizadeh et al. teach DNS resolutions for internal and external networks and Srisuresh et al. teach one of the well known features of networking "network address translation" or "NAT" which provides different addresses for the internal and external addresses; and keeps internal network(s) hidden from the external network(s). Further, the encapsulation method is also well known in the art of networking which includes routers/gateways, where multiple addresses are embedded/encapsulated in one packet till the packet reaches the destination address after passing through one or plurality of hops (intermediate addresses) from a source address. Router(s)/gateway(s) are taught both in Sistanizadeh et al. and Srisuresh et al. When one of ordinary skill in the art combines references Sistanizadeh et al. and Srisuresh et al.; it would obviously provide the claimed limitations of the applicant as set forth in claims 1-4 and 6-16. Therefore, the examiner retained the rejection of the application.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

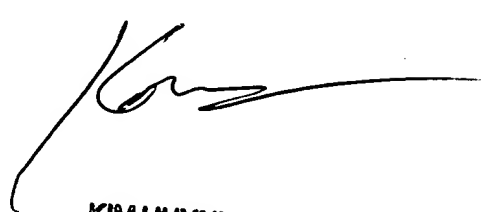
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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad O. Farooq
June 18, 2005


KIM HUYNH
PRIMARY EXAMINER

6/23/05